## ABSTRACT OF THE DISCLOSURE

An apparatus and method of precisely controlling deflection or twisting of a surgical instrument during surgery is applied to a surgical instrument incorporating a shape memory alloy. An example of such an instrument is a Nitinol urological retrieval coil. The shape memory alloy is caused to assume a predetermined shape when heated to a predetermined temperature not more than a few degrees above body temperature, by delivering irrigating fluid having a temperature above the transformation temperature of the shape memory alloy.